If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.

Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ

Training Office, Bldg. 911A.

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.1.e Electrical Safety Training Requirements for Ring Entry

	C-A-OPM Pro	ocedure in w	hich this Attac	hment is used		
	4.1					
		Hand Pro	ocessed Changes			
HPC N	<u>o.</u> <u>Da</u>		Page Nos.		<u>nitials</u>	
	Approve		ignature on File -Accelerator De		nan	Date
P. Ingrassia						

4.1.e Electrical Safety Training Requirements or Ring Entry

RING CONDITIONS	TRAINING REQUIREMENT	ENTRANT'S REQUIREMENT	
 EVERY item on C-A LOTO list is LOTO. Entrants will only observe or advise. Entrants will not work on apparatus physically attached to the accelerator, or connected to the vacuum chamber (except for the Rf Power Amplifier system). 	Valid C-A Access Training on Permit C.	 AA256A key + ID/RW1 card. NO LOTO lock required. 	
 EVERY item on C-A LOTO list is LOTO. Entrants will work on apparatus physically attached to the accelerator. 	 Valid Lockout/Tagout training on Permit B. Valid Electrical Safety training on Permit B. Valid C-A Access on Permit C. 	 LOTO lock on Token Box. AA256A key +ID/RW1 card. 	
Some apparatus from the AGS OPM C-A LOTO checklist remains energized.	 Valid Lockout/Tagout training on Permit B. Valid Electrical Safety training on Permit B. Valid C-A Access training on Permit C. 	 LOTO lock on Token Box. Energized Circuit Work Permit (OPM Att. 2.6.2.a) issued by OC. AA256A key + ID/RW1 card. 	
Only the Main Magnet Power Supply is LOTO.	 Valid Lockout/Tagout training on Permit B. Valid Electrical Safety training on Permit B. Valid Working Hot training on Permit B. Valid C-A Access training on Permit C. 	 LOTO lock on Token Box. Energized Circuit Work Permit (OPM Att. 2.6.2.a) issued by OC. AA256A key + ID/RW1 card. 	
The ring main magnets are energized.	 Valid Lockout/Tagout training on Permit B. Valid Electrical Safety training on Permit B. Valid Working Hot training on Permit B. Valid C-A Access training on Permit C. Tasks specified on Range D Working Hot Permit. 	 LOTO lock on Token Box. Energized Circuit Work Permit (OPM Att. 2.6.2.a) issued by OC. Task specific Range D Working Hot Permit. AA256A key + ID/RW1 card. 	